

**--I CLAIM AS MY INVENTION:--** therefor.

5            14.     A housing for an implantable tissue stimulating device having an electrode lead with an electrode, said housing being adapted for connection to said electrode lead and said stimulating device generating a voltage between said housing and said electrode, said voltage having an electric field associated therewith, said housing comprising:

a second wall having a generally flat second exterior surface; and  
a circumferential third wall joining said first wall and said second wall,

15 said third wall being composed of conductive material and  
adapted for electrical contact with surrounding tissue when  
said housing is implanted to serve as an electrode, said [third]  
circumferential <sup>third</sup> wall having a curved first circumferential wall  
section connected to said first wall and a curved second  
20 circumferential wall section connected to said second wall,  
said first circumferential wall section having a radius of  
curvature smaller than a radius of curvature of said second  
wall section, for curve radii in planes substantially  
perpendicular to said first surface and said second surface,  
25 causing said electric field to have a lower field strength along  
said second circumferential wall section than along said first  
circumferential wall section.

15. A housing as claimed in claim 14 wherein said first wall is composed of conductive material and is adapted to be an electrical contact with surrounding tissue for serving as an electrode in combination with the electrode formed by said third wall.

5 16. A housing as claimed in claim 14 wherein said second wall is composed of conductive material and is adapted to be an electrical contact with surrounding tissue for serving as an electrode in combination with the electrode formed by said third wall.

10 17. A housing as claimed in claim 14 wherein each of said first circumferential wall section and said second circumferential wall section is circularly curved in said planes.

15 18. A housing as claimed in claim 17 wherein said first circumferential wall section has a center of curvature along a continuous first curve, and wherein said second circumferential wall section has a center of curvature along a continuous second curve.

19. A housing as claimed in claim 18 wherein said first curve and said second curve are substantially parallel.

20 20. A housing as claimed in claim 14 wherein the respective curve radii of said first circumferential wall section and said second circumferential wall section in said planes is in a range between 1:2 and 1:6.

21. A housing as claimed in claim 20 wherein said ratio is approximately 1:4.

22. A housing as claimed in claim 14 wherein said first surface is rough.

23. A housing as claimed in claim 14 wherein said first surface is contoured.

5            24. A housing as claimed in claim 23 wherein said first surface has a plurality of exterior ridges.

25. A housing as claimed in claim 24 wherein each of said ridges has at least one edge with a sharp corner.

10           26. A housing as claimed in claim 14 wherein said second surface is polished.

**IN THE ABSTRACT:**

Please add an Abstract as shown on separately numbered page 14 attached hereto.